IN THE SPECIFICATION

Please amend the specification as follows:

Please substitute the paragraph beginning at page 3, line 23, with the following.

-- Accordingly, a prime object of the present invention is to provide an exposure apparatus and a method capable of flexibly supporting discharge lamps of a variety of different types. --

Please substitute the paragraph beginning at page 4, line 12, with the following.

-- According to the present invention, the foregoing objects are attained by providing an exposure apparatus and a method, a device manufacturing method using this exposure apparatus, and a discharge lamp constructed as set forth below. --

Please substitute the paragraph beginning at page 10, line 12, with the following.

-- In accordance with a preferred embodiment of the present invention, the mark or shape ~~with~~ which the discharge lamp uses is provided to achieve a plurality of applications. --

Please substitute the paragraph beginning at page 12, line 8, and ending on page 13, line 1, with the following.

-- As shown in Fig. 1, the semiconductor exposure apparatus includes a discharge lamp 1 serving as a light-emitting source used as the light source of the apparatus. By way of example, the discharge lamp is a high-voltage mercury-vapor lamp that generates i line light or g line light.

The apparatus further includes an elliptical mirror 2 for collecting the ray from the discharge lamp 1; a first zoom lens 3 for projecting the image of the arc of the discharge lamp 1, which image is formed on a second focal point of the elliptical mirror 2, onto an input section of a ~~fly eye's~~ fly's eye lens 7 upon changing the size of the image; a motor 4 for driving the first zoom lens 3; an optical filter 5 for transmitting only a specific wavelength; a reflecting mirror 6; the ~~fly eye's~~ fly's eye lens 7; an aperture 8 for deciding the effective shape of the light source; a condenser lens 9, a masking plate 10, which is located at a reticle conjugate point, for limiting the exposure area on a reticle 12; and relay lenses 11. These elements construct an illumination optical point. --

Please substitute the paragraph beginning at page 15, line 4, with the following.

-- One characterizing feature of this embodiment is that an annular groove 48 is formed in the support column 45 at a specific position (height). As will be described later, the groove 48 has two functions, namely a marking function for identifying the type of discharge lamp or for determining whether a discharge lamp has been mounted or not, and a cooling-groove function for passing the cooling gas (clean dry air) that cools the discharge lamp. The ~~cross-sectional~~ cross-sectional area of the groove or the position at which it is formed is changed depending upon the type of discharge lamp. --

Please substitute the paragraph beginning at page 15, line 15, and ending on page 16, line 5, with the following.

-- Fig. 3 is an enlarged view of the portion for mounting the discharge lamp as seen from the side. The groove 48 for allowing the passage of air is provided at a specific position of the support column 45 of discharge lamp 1, and the passageways 31, 32 through which the air flows are provided at specific positions of the discharge lamp mounting portion 15. As shown in Fig. 3, the passageway 31 passes air for cooling the discharge lamp 1 and the passageway 32 is for recognizing whether the discharge lamp 1 has been mounted. In Fig. 3, only the upper passageway 31 coincides with the groove 48 of the discharge lamp. More specifically, the passageway 31 is open owing to ~~coinside~~ coincide with the groove 48. The pressure within passageway 31, therefore, declines. The passageway 32, on the other hand, is closed and its internal pressure, therefore, is higher than the pressure in passageway 31. --

Please substitute the paragraph beginning at page 16, line 21, and ending on page 17, line 1, with the following.

-- In a modification, the support column of the discharge lamp is provided with a through-hole 49 instead of the groove-shaped air passageway, as shown in Fig. 5, and the discharge lamp mounting portion is provided with a semicircular groove. In this case, the air flows through the through-hole 49 in the manner illustrated by the arrow. --

Please substitute the paragraph beginning at page 17, line 2, with the following.

-- According to the present embodiment, a maintenance worker mounts the discharge lamp 1 in the discharge lamp mounting portion 15 and then is capable of entering the type of

mounted discharge lamp using the input means 25. When the type of discharge lamp 1 has been entered by the input means 25, the controller 18 compares this with information that has been stored in the memory means 26. In a case ~~where~~ in which the result of the comparison indicates that the entered type of discharge lamp is not registered in the memory means 26, a firing command will not be sent to the power source 17, thereby inhibiting firing of the discharge lamp, even if the worker attempts to send such a command. At the same time, a warning indication is presented to the worker to inform the worker that the type of discharge lamp has not been registered. The input means 25 has a function for registering discharge lamps of a new type. Even if a new type of discharge lamp becomes available, therefore, the discharge lamp can be used under optimum conditions once it has been registered. --

Please substitute the paragraph beginning at page 17, line 22, and ending on page 18, line 2, with the following.

-- In a case ~~where~~ in which the result of the comparison indicates that the entered type of discharge lamp has already been registered in the memory means 26, the optimum conditions under which this discharge lamp can be used is read out of the memory means 26 and at least one, and preferably two or more, of the following conditions of use is set by the worker: --

Please substitute the paragraph beginning at page 18, line 11, with the following.

-- (2) Power-source conditions of the discharge lamp --

Please substitute the paragraph beginning at page 19, line 3, with the following.

-- With the discharge lamp 1 mounted in place as shown in Fig. 1, the states of the pressure sensors 23, 24 enter the controller 18 as the contact input signals f, g, respectively. As a result, the controller 18 detects the absence or presence of grooves at a plurality of specified positions of the discharge lamp support column and identifies the type of discharge lamp based upon the results of the detection. --

Please substitute the paragraph beginning at page 19, line 16, and ending on page 20, line 5, with the following.

-- In the event that the pressure sensors 23, 24 both sense low pressure, the controller 18 decides that a discharge lamp has not been mounted. Even if a worker should attempt to enter a discharge lamp firing command, the command will not be delivered to the power source 17 and, hence, the generation of high voltage will be inhibited. Conversely, in the event that the pressure sensors 23, 24 both sense high pressure, the controller 18 decides that an unidentifiable discharge lamp has been mounted. Even if a worker should attempt to enter a discharge lamp firing command, the command will not be delivered to the power source 17 and, hence, firing of the discharge lamp will be inhibited. This eliminates ~~that~~ the possibility that a malfunction will be caused by using a discharge lamp that does not satisfy the established conditions. --

Please substitute the paragraph beginning at page 20, line 15, and ending on page 21, line 11, with the following.

-- Other sensors such as optical, magnetic or mechanical sensors may be used instead of pressure sensors to identify the type of discharge lamp. In such a case a discharge lamp would be provided with a characterizing portion (mark or shape) capable of being identified by the sensor. For example, a characterizing three-dimensional shape or planar shape, or a characterizing mark using a pattern, color, reflectivity or audio is conceivable. As a specific example of a feasible arrangement, a fiber sensor usable under conditions of high temperature can be employed as a sensor, a groove or hole can be provided on the discharge lamp side at a position sensed by the fiber sensor, or the reflectivity of this location can be changed. In a case ~~where~~ in which a sensor other than a pressure sensor is used to recognize the type of discharge lamp, there is the possibility that sensing precision will be adversely affected because of high temperature produced when the discharge lamp is lit. However, this problem can be avoided if sensing is performed by bringing the sensor close to the discharge lamp in the cool period before the lamp is fired and then separating the sensor from the lamp after it is fired. --

Please substitute the paragraph beginning at page 22, line 14, line 5, with the following.

-- Furthermore, the support column of a discharge lamp is provided with a groove or hole through which a gas is capable of passing, and the type of discharge lamp, or whether or ~~not,~~ not a discharge lamp has been mounted, is determined based upon the pressure of the gas. This assures more reliable cooling and makes it possible to identify a discharge lamp with greater certainty. --

Please substitute the paragraph beginning at page 23, line 7, and ending on page 23, line 2, with the following.

-- Fig. 6 is a diagram showing the flow of ~~manufacture of~~ manufacturing a microdevice (e.g., a semiconductor ship such as an IC or LSI chip, a liquid crystal panel, a CCD, a thin-film magnetic head, a micromachine, etc.). The pattern for the device is designed at step 1 (circuit design). A mask on which the designed circuit pattern has been formed is fabricated at step 2 (mask fabrication). Meanwhile, a wafer is manufactured using a material such as silicon or glass at step 3 (wafer manufacture). The actual circuit is formed on the wafer by lithography, using the mask and wafer that have been prepared, at step 4 (wafer process), which is also referred to as a "pre-process". A semiconductor chip is obtained, using the wafer fabricated at step 2, at step 5 (assembly), which is also referred to as a "post-process". This step includes steps such as actual assembly (dicing and bonding) and packaging (chip encapsulation). The semiconductor device fabricated at step 5 is subjected to inspections such as an operation verification test and a durability test at step 6 (inspection). The semiconductor device is completed and through these steps and then is shipped (step 7). --

Please substitute the paragraph beginning at page 24, line 21, with the following.

-- If the production process using this embodiment is employed, highly precise devices can be manufactured at low cost. Manufacture of such devices using the ~~prior-art~~ prior art techniques was difficult. --